Anderson, Mary (WCC)

From: Clark, Mark (ECY WCC)
Sent: Monday, March 06, 2006 8:08 AM
To: Anderson, Mary (WCC)
Subject: FW: Electronic Directive WA180-6-5

CC meeting - livestock header
-----Original Message-----
From: Easter, Frank - Spokane, WA [mailto:Frank.Easter@wa.usda.gov]
Sent: Wednesday, February 08, 2006 2:32 PM
To: Clark, Mark (ECY WCC)
Cc: Hughbanks, Gus - Spokane, WA
Subject: FW: Electronic Directive WA180-6-5

Mark,

We just sent this out to our field offices. There is allot of confusion in the field about the difference between a CNMP and DNMP. Until the Feds and the State decide on the new rules, NRCS will provide assistance to producers based on this national guidance. We also sent this to Nora under separate cover.

From: Randazzo, Kathleen - Spokane, WA
Sent: Wednesday, February 08, 2006 1:27 PM
To: ug-WA-nrcs
Subject: Electronic Directive WA180-6-5

Attached is Washington Bulletin WA180-6-5, Planning Comprehensive Nurient Management Plans and attachments.

Kathy Randazzo
Secretary
State Conservationist's Office
316 W. Boone Avenue, Suite 450
Spokane, WA 99201
(509) 323-2900
kathy.randazzo@wa.usda.gov

NRCS

Natural Resources Conservation Service
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509-323-2900
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web site www.wa.nrcs.usda.gov

Date: February 10, 2006

WASHINGTON BULLETIN WA

SUBJECT: 180 – Planning Comprehensive Nutrient Management Plans

Purpose: Transmit Technical Guidance

Expiration Date: September 30, 2006

Nutrient Management Plans required for Confined Animal Feeding Operations (CAFOs) by the State will also reference NRCS planning policy and the eFOTG.

NRCS employees and others using our technical standards to assist livestock producers need to clearly understand the laws and minimum requirements from NRCS, EPA and Washington State.

Even though we do not know what the final federal or state laws will say related to animal feeding operations, NRCS will proceed with the basic assumption that it makes good sense to not discharge manure or other pollutants into surface or ground water.

NRCS employees also need to understand our role in assisting animal feeding operations from becoming dischargers (CAFOs).

The attachments to this bulletin are intended to be used as guidance when planning with livestock producers.

If you have questions and or need further information please contact me at 509-323-2961.

Frank Easter
State Resource Conservationist

TECHNICAL GUIDANCE FOR PLANNING WITH ANIMAL FEEDING OPERATIONS (AFOs) AND CONCENTRATED ANIMAL FEEDING OPERATIONS (CAFOs)

BACKGROUND

NRCS has been providing conservation planning assistance to livestock operations for over 70 years. In the late 1970s and again in 2003, NRCS planning procedures and practice standards were required under state law for water quality improvement on dairy operations.

On February 12, 2003, the United States Environmental Protection Agency (EPA) published revisions to its Clean Water Act regulations for concentrated animal feeding operations (CAFOs).

In 2003 the Washington State Legislature passed ESSB 5889 which transfers, duties and functions for concentrated livestock water quality issues from the Washington Department of Ecology (WDOE) to the Washington Department of Agriculture (WDOA).

The WDOA has been working with the Livestock Oversight and Development Committee to develop the required State water quality program for both AFOs and CAFOs in order to comply with the federal EPA regulations.

NRCS planning and practice standards will most likely be a component of the State CAFO permit requirements for livestock producers.

CHALLENGES

In order for NRCS to help meet the needs of the livestock producers who may be required to have a CAFO permit and plan. Or to help producers avoid the permit requirement, **NRCS must be ready to**;

- Provide the best available technology in an understandable manner to the producer.
- Know how to effectively plan WITH the producer.
- Know the State regulation requirements

- Know the NRCS planning and practice requirements for a CNMP, DNMP and NMP.

- Provide both technical and financial assistance to producers.

- Know their role in the program.

NRCS employees involved in developing plans with the producers must clearly understand the definitions and requirements from EPA, WDOA, WDOE and NRCS.

IMPORTANT DEFINITIONS

COMPREHENSIVE NUTRIENT MANAGEMENT PLAN (CNMP)

A CNMP is an NRCS conservation plan that is unique to animal feeding operations. It is a grouping of conservation practices and management activities which, when implemented as part of a conservation system, will help to ensure that both production and natural resource protection goals are achieved. A CNMP incorporates practices to utilize animal manure and organic by-products as a beneficial resource. A CNMP addresses natural resource concerns dealing with soil erosion, manure, and organic by-products and their potential impacts on water quality, which may derive from an AFO. A CNMP is developed to assist an AFO owner/operator in meeting all applicable local, state, tribal and federal water quality goals and regulations.

The conservation practices and management activities planned and implemented as part of a CNMP must meet NRCS technical standards. For those elements included by an owner and/or operator in a CNMP for which NRCS currently does not maintain technical standards, producers will meet criteria established by the Land Grant University, industry, or other technically qualified entities. Within each state the NRCS State Conservationist has the authority to approve non-NRCS criteria established for use in the planning and implementation of CNMP elements.

NUTRIENT MANAGEMENT PLAN (NMP)

The NMP is defined in the EPA Revised Clean Water Act Regulations for CAFOs and is required for all NPDES Permits. The plan has to describe the practices that achieve the discharge limits and specific management practices in the NPDES Permit.

DAIRY NUTRIENT MANAGEMENT PLAN (DNMP)

The DNMP is required for all dairies in the State by WDOE and WDOA. The plans met NRCS planning and practice standards prior to December 31, 2004. Plans include all practices and management that pertain to the safe collection, transfer, storage, application and utilization of manure nutrients.

REFER TO THE NEXT PAGE FOR A COMPARISON OF THE PLAN ELEMENTS OF THE THREE PLANS DEFINED ABOVE.

NRCS NUTRIENT MANAGEMENT PLAN (NRCS NMP)

An NRCS nutrient management plan is a component of a comprehensive nutrient management plan (CNMP). It also includes all nutrient management activities involving inorganic forms of fertilizers on operations not involved with livestock. For livestock operations, it deals specifically with managing the amount, source, placement, form and timing of the application of manure nutrients and soil amendments. Nutrients from all sources (i.e., commercial fertilizer, legumes, irrigation water, etc.) must be included in the nutrient management planning process when used. Records need to kept on how and where manure is utilized including current soil and manure tests.

ADDITIONAL PLANNING CONSIDERATIONS FOR CNMPs

NRCS National Planning Procedures Handbook, Subpart E, Part 600.50

- Air Quality
- Pathogens
- Record Keeping
- Feed Management

Washington State Department of Ecology – http://www.ecy.wa.gov

- Proper Management of Dead Animals - On-Farm Composting of Livestock Mortalities
- Fugitive Dust Control Guidelines For Beef Cattle Feedlots and Best Management Practices – See attached.

- Draft Concentrated Animal Feeding Operation(CAFO), National Pollutant Discharge Elimination System(NPDES) and State Waste Discharge General Permit

NRCS Practice Standards and Tools- To address new requirements

- Animal Mortality Facility PS-316
- Composting Facility PS-317
- Emergency Response Plan – See Attached

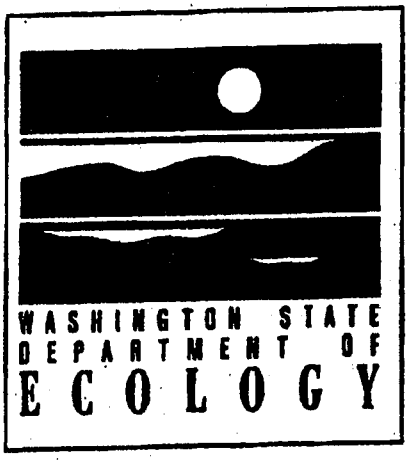
Washington State Department of Agriculture-

Disposal of animal medical waste – State Veterinarian
(Cannot be mixed with Manure)

Disposal of spoiled feed –
(Feed made up of common ingredients like corn, soybean meal, minerals and vitamins at common concentrations can be mixed with manure)
(Feed that has concentrated additives or drugs may pose an environmental risk if mixed with manure and applied to high risk sites.

PLAN COMPARISONS

Plan Elements	CNMP	DNMP	NMP
Adequate Storage Capacity	**X**	**X**	**X**
Proper Management of Dead Animals	**X**		**X**
Clean Water Management	**X**	**X**	**X**
Preventing Animal to Water Contact	**X**		**X**
Proper Chemical Handling	**X**		**X**
Practices to Control Runoff	**X**	**X**	**X**
Testing of Manure, Waste Water, Litter Soil	**X**	**X**	**X**
Nutrient Balance / Budget	**X**	**X**	**X**
Methods for Application of Manure, Waste Water, Litter	**X**	**X**	**X**
Record Keeping	**X**	**X**	**X**
Feed Management	**Optional**		
Optional Uses – Composting, Power Generation, Feed Stock, Etc.	**Optional**		
Emergency Response Plan	**X**		**X**
Operation and Maintenance Requirements of Practices	**X**	**X**	
Manure / Waste Water / Litter Application scheduled by Field by Month	**X**	**X**	
Sensitive Areas Identified with Application Setback Requirements	**X**	**X**	**X**
Waste Storage Pond Markers Required			**X**
Air Quality	**X**		
Pathogens	**X**		



FUGITIVE DUST CONTROL GUIDELINES FOR BEEF CATTLE FEEDLOTS

AND

BEST MANAGEMENT PRACTICES

Air Quality Program
Department of Ecology

Program Manager Approval: _____

Date: 12/13/05

TABLE OF CONTENTS

BACKGROUND

Introduction

A beef cattle feedlot is a facility at which cattle are confined throughout the year, and fed high energy rations for the eventual purpose of marketing. While there are dozens of small feedlot operations in Washington State, the Department of Ecology has recognized beef cattle feedlots with inventories of over 1,000 head as potential air pollution sources since the initial adoption of registration regulations in 1976. There are several feedlots located in eastern and central Washington which support normal inventories in excess of 1,000 head. Ecology's primary air quality concern regarding feedlots is the generation of fugitive dust emissions from feed pens, roads, and alleyways.

During the hot, dry weather typical in central and eastern Washington during the summer months, cattle are lethargic during the heat of the day. When temperatures drop in the evening, the cattle become active and have the potential to generate significant quantities of fugitive dust from pens. Vehicle traffic on unpaved roads and cattle movement in alleys can also contribute to fugitive dust emissions from feedlots. This dust may impact neighboring properties, and Ecology and local air pollution control authorities have received complaints from feedlot neighbors regarding fugitive dust.

In recent years, most feedlot operators have instituted various practices to control fugitive dust emissions. Fugitive dust control measures can require a significant commitment of time and resources by feedlot owners and operators.

Washington Administrative Code (WAC) 173-400-040 requires air pollution sources to take "reasonable precautions" to prevent the release of fugitive emissions. Since particulate emissions from feedlots are considered to be fugitive dust emissions, these guidelines are intended to use existing regulations and clarify what constitutes "reasonable precautions" to minimize emissions of fugitive dust from feedlots. The primary mechanism for doing this is to identify best management practices (BMPs) for fugitive dust control and implement these practices according to flexible, site-specific fugitive dust control plans developed by each feedlot and approved by Ecology or the appropriate local air authority.

GUIDELINES

I. What is the Purpose of the Guidelines?

The purpose of these guidelines is:

- To achieve sufficient control of fugitive dust emissions and fallout from cattle feedlots to ensure compliance with state laws and regulations.
- To achieve dust control by describing a menu of best management practices (BMPs) for cattle feedlots which will be implemented through the use of flexible, site-specific fugitive dust control plans.
- To clarify what constitutes "reasonable precautions to prevent" emissions of fugitive dust as required by WAC 173-400-040(3) and WAC 173-400-040(8)(a).
- To educate feedlot owners and operators on effective management of fugitive dust control measures and provide a means by which cattle feedlots can demonstrate that they are taking reasonable precautions to protect the quality of Washington's air.

II. Who Needs to Comply with the Guidelines?

- All cattle feedlots with inventories of over 1,000 head of cattle confined and fed during the dry season must comply with these guidelines.
- These guidelines may also be followed for resolving fugitive dust emission problems which may arise from feedlots with smaller inventories.

III. How do the Guidelines Work?

- Cattle feedlot operators will prepare fugitive dust control plans for each feedlot and submit them to Ecology or the appropriate local air authority for approval.
- A feedlot's plan must identify best management practices (BMPs) and operational procedures which the feedlot proposes to use to control fugitive dust.
- Ecology or the local air authority and the feedlot are expected to work together in good faith toward development of a dust control plan which is acceptable to both the feedlot and the appropriate agency.
- Feedlots will implement approved fugitive dust control plans according to the criteria and/or implementation schedules outlined in their plans.
- A feedlot may make modifications to an approved fugitive dust control plan as long as the effectiveness of the plan is not compromised.

- Ecology or the local air authority may initiate negotiations with a feedlot to modify an approved plan, if that plan is not sufficiently effective in minimizing fugitive dust emissions.

IV. Where and When Should Dust Control Plans be Filed?

- Feedlots located within the boundaries of a local air authority should submit plans to the authority.
- Feedlots located outside the boundaries of a local air authority should submit plans to the appropriate Department of Ecology Regional Office.
- Existing feedlots will submit plans within four months of the effective date of the guidelines, unless a later date is agreed upon by Ecology or the local air authority.
- New or expanding feedlots will file a notice of construction which includes a fugitive dust control plan for the new facility or addition. This plan must be approved prior to construction.

V. What must be in a Feedlot's Dust Control Plan?

1. A description of the feedlot, including:

- a map or drawing of the feedlot which adequately represents the layout of the feedlot and provides enough detail to allow Ecology or the local air authority to adequately review the feasibility and appropriateness of various BMPs for the facility. The map or drawing should show all:

  1) pens;
  2) feeding bunks;
  3) alleyways; and
  4) roads

  Where representations of the smaller features of a feedlot are impractical, descriptions of these features may be footnoted.

- a description of the operational capacity of the feedlot, including the maximum number of cattle which could be confined.
- a description of the water available to the feedlot for dust control. This description should include the source and quantity of water available, and any permit or other limitations which would impact the feedlot's ability to employ water application as a BMP.
- a description of site-specific features or characteristics which could complicate or prevent implementation of particular BMPs. For example: pens built on bedrock may inhibit installation of underground sprinkling systems, or narrow alleys may prevent water application by truck for portions of a facility.

2. A description of BMPs to be used under the plan.

Both existing and newly-proposed BMPs for control of dust from cattle pens, sorting alleys, feed alleys, and other roads should be described. Descriptions must include:

- which BMP or BMPs will be used, where they will be used, and what percentage of the facility they will be applied to;
- a description of the equipment and materials to be used, including a description of the normal operational capacity or application rate of any equipment;
- an operational plan for implementing each BMP.

The operational plan should describe how the feedlot will implement BMPs and the conditions or criteria the feedlot will use to determine when and how to implement each BMP.

It is recognized that feedlot operations and conditions are variable and that the same BMP may be implemented differently by individual feedlots. This variability makes the description of how BMPs will be operated, an especially important component of a feedlot's fugitive dust control plan.

The operational plan must describe the criteria the feedlot will use to determine when to implement each BMP and the criteria for selecting application rates, if applicable. Examples of criteria include:

1) pen conditions --- such as moisture, surface compaction, amount of loose material, mound condition, etc.;
2) recent weather;
3) forecasted weather; and
4) cattle inventory

- identification of a contact person at the facility who is knowledgeable about the BMPs in the feedlot's dust control plan and their implementation.

3. A schedule of future BMP implementation, if applicable.

If a feedlot intends to implement an additional BMP or BMPs in the future, a target date for implementation of the future BMPs should be included in the feedlot's fugitive dust control plan.

For example: If Feedlot A intends to install a sprinkler system to cover a portion of their facility, but cannot afford the capital expense of the system for some period of time, Feedlot A's fugitive dust control plan should describe the measures to be used to control dust until the sprinklers are operational and provide a target date for installation of the sprinkler system.

VI. How are Plans Developed and Approved?

- A cattle feedlot is responsible for preparing a fugitive dust control plan and submitting the plan to Ecology or the appropriate local air authority for approval. Agricultural extension agents, consultants or other assistance may be used in developing and reviewing the plan.

- Within 30 days, Ecology or local air authority staff review the plan and notify the feedlot of plan approval or request additional information or propose alternative practices to approve the plan.

- Feedlots respond to agency requests for information or modification of the plan within 30 days.

- The approval process may include good faith discussion, evaluation, collection of information, and other efforts to resolve differences of opinion about the plan, so long as reasonable progress toward the development and approval of the feedlot's fugitive dust control plan is being made.

  The purpose of good faith negotiation is to share information and resolve differences of opinion regarding a feedlot's fugitive dust control plan. Both the feedlot and Ecology or the local air authority need to be able to exchange information freely and in good faith. Information obtained by Ecology or the local air authority in the course of negotiation is not obtained for the purpose of any future enforcement activity.

- If agreement on a feedlot's fugitive dust control plan cannot be reached after thorough good faith evaluation of alternatives and consideration of plan effectiveness, costs, and other pertinent matters, Ecology or the local air authority may initiate compliance action under RCW 70.94, WAC 173-400, or applicable local air regulations.

VII. How Can Changes be Made to an Approved Plan?

- A feedlot may make modifications to an approved fugitive dust control plan as long as the effectiveness of the plan is not compromised. Changes to a plan must be documented and Ecology or the local air authority must be notified of the changes. Modifications include but are not limited to:

  - discontinuance or addition of any equipment
  - changes in use of equipment
  - changes in operational procedures
  - changes in criteria used to determine BMP implementation and application rates

VIII. How Does an Agency Determine When a Dust Control Plan is Adequate?

In considering whether a dust control plan achieves the purpose of the guidelines, Ecology or local air authorities may consider:

- whether the plan utilizes BMP's identified in Section X of these guidelines
- consistency between the proposed BMP's and the BMP's outlined in the guidelines
- the extent of use and effectiveness of a proposed measure in reducing dust at other feedlots
- the ability of the proposed BMPs to maintain conditions which adequately minimize emissions
- other measures in the plan which may be effective in minimizing fugitive dust, but which are not recognized BMPs
- the adequacy of the operational plan, including the criteria used to begin, end and apply the proposed BMPs

IX. How Will Compliance with the Plan and Effectiveness of the Plan be Determined?

Compliance

After a fugitive dust control plan has been approved, a feedlot may be inspected to determine if the BMPs and their operational plans are in effect.

Effectiveness

After the plan is in place, inspection results may be used to evaluate the effectiveness of the plan in reducing fugitive dust.

If inspections indicate that the plan is not effective, Ecology or the local air authority will request information from the feedlot or propose additional or alternative dust control measures. As with the development of the initial plan, Ecology or the local air authorities and the feedlot will work together in good faith to revise the fugitive dust control plan to increase its effectiveness.

X. Description and use of Best Management Practices

General Principles

- A dust control plan may modify the design or operation of BMP's from the systems described below as long as their effectiveness is not compromised.

- The principle mechanism by which most of these BMP's operate is to maintain pen, alley, and roadway conditions which prevent loose particles from become airborne as fugitive dust.

Best Management Practices

1. Fixed Water Application - Sprinklers

Description

Sprinklers are installed throughout the cattle pens to apply water to the pen surface to prevent dust from becoming airborne. Sprinklers must be designed and installed to allow maximum practical coverage of the pen area and be capable of applying adequate amounts of water to control fugitive dust. Sprinkler systems can provide uniform pen coverage under favorable weather conditions (low wind). High winds can reduce the effectiveness of sprinkler systems.

High and low pressure sprinkler systems may be used to control fugitive dust. High pressure systems use fewer sprinkler heads under greater pressure to achieve pen coverage. Low pressure systems generally use a higher number of heads at a lower pressure. System cost and a feedlot's pen layout and characteristics are factors which will affect the choice of system. To effectively use any sprinkler system, pre-planning of water application is needed. Sprinklers can be fitted with automated control systems to minimize the labor required to operate the system. Sprinkler systems require varying degrees of maintenance to ensure their effectiveness.

Factors to Consider in Selecting Fixed Water Application as a BMP

- Availability of sufficient quantities of water to control dust
- Capital and operating costs for equipment
- Cost of water
- Water quality concerns, including potential for run-off
- Potential insect breeding and odor problems
- Selection of criteria for determining when to apply water and what application rates to use under variable conditions

2. Mobile Water Application - Water Trucks

Description

Trucks with water tanks and spray nozzles are driven through alleyways between feeding pens and water is applied to the pen surface to prevent dust from becoming airborne. Proper equipment and operation is necessary to obtain coverage sufficient to ensure that pen conditions are adequate to minimize generation of dust. Because large areas cannot be simultaneously covered by a water truck, the decision to apply water must be made early enough that there is sufficient start up time to achieve adequate coverage before fugitive dust becomes a problem. The feedlot must have sufficient equipment and an operational plan for its use which will allow coverage of the target area.

Water trucks may have a lower fixed cost than large sprinkler systems, but may also have higher operating costs due to the labor required to operate the truck and spray nozzles. A facility to refill water tanks is required. Maintenance of water trucks and spray equipment is critical to minimizing equipment breakdowns.

Water trucks are versatile and can be equipped to apply water to road and alleyways in addition to pens.

Factors to Consider in Selecting Mobile Water Application as a BMP

- Availability of sufficient quantities of water to control dust
- Capital and operating costs for equipment
- Cost of water
- Water quality concerns, including potential for run-off
- Potential insect breeding and odor problems
- Selection of criteria for determining when to apply water and what application rates to use under variable conditions
- Lead-time to achieve adequate coverage

3. Increasing Animal Density -- Cross fencing

Description

Increasing the density of cattle in a pen increases the moisture contribution to the pen from manure and urine. This increased moisture, in turn, reduces dust emissions. Increased cattle density can be achieved by using smaller permanent pens, increasing the number of cattle in a pen, or by temporarily cross fencing larger pens with electric wire, or with wood or metal panels. Animal density must be adequate to maintain pen conditions which will substantially minimize fugitive dust.

Cross fencing may have lower fixed and operating costs than sprinkler systems or water trucks. However, if cross fencing by itself cannot maintain adequate pen moisture to control dust, supplemental water may need to be applied. If water application is necessary, cross fencing will reduce the area needing coverage and generally shorten the time period during which water application may be needed.

Factors to Consider in Selecting Animal Density as a BMP

- Availability of cross-fencing material
- Cost of materials
- Labor cost to install and maintain cross-fences
- Criteria used to time installation is critical to success
- Ability to supplement with other BMPs, such as water application or pen maintenance
- Physical limitations such as location of livestock watering tanks

4. Pen Maintenance

Description

Removing manure from pens may reduce dust emissions by limiting the volume of loose material which can become airborne. If used in conjunction with water application, this practice may reduce the volume of water needed for dust control.

A feedlot must have an appropriate place to store or dispose of manure removed from pens.

Factors to Consider in Selecting Pen Maintenance as a BMP

- Size and number of pens
- Cost of labor and equipment
- Minimized disturbance of hard pan
- Control of dust during maintenance work
- Criteria used to time maintenance work is critical to success
- Ability to supplement with other BMPs, such as water application

5. Surface Amendments/Applications

Description

Spreading sawdust, apple pumace, or other materials over the surface of pens and alleyways provides dust control by adding texture or moisture to the surface of the pens or alleys or by increasing the compaction of the surface area. Application of organic material may be suitable mainly for alleyways. Application of certain types of flyash may also harden the manure surface in pens and further contribute to dust control.

As with pen maintenance, surface applications may be more successful and cost-effective at smaller feedlots. Costs of surface amendments or applications will be variable, but may be expensive if applied to large areas.

Factors to Consider in Selecting Surface Amendment as a BMP

- Size and number of pens
- Consistent availability of materials
- Cost of materials
- Cost of labor
- Criteria used to time maintenance work is critical to success
- Ability to supplement with other BMPs

6. Wet Manure/Mound Management

Description

Feedlots in the Pacific Northwest mound packed manure to aid in keeping animals dry and comfortable through the wet periods of the winter. As rain falls and the top few inches of the mounds become saturated, this wet material is scraped off and stock-piled (in the pens), revealing dry material underneath. This provides the cattle a dry area to bed down.

The stock-piled wet manure is spread back over the mound in the spring and summer and allowed to dry. This spreading of damp material throughout the pen can add moisture to the pen and aids in surface compaction.

Factors to Consider in Selecting Mound Management as a BMP

- Size and number of pens
- Cost of labor and equipment
- Mounding requirements/practices
- Criteria used to time maintenance work is critical to success
- Ability to supplement with other BMPs

7. Windbreaks

Description

Planting tall vegetation, such as poplar trees, along the edge of the feedlot may be effective in reducing the volume of dust which is carried away from the feedlot by prevailing winds.

Windbreaks depend on weather conditions for their effectiveness. Changes in wind direction will compromise the effectiveness of this practice.

Poplar trees take six years to reach mature heights and require substantial quantities of water to grow rapidly.

This practice has been untested with respect to controlling fugitive dust from feedlots, but has been effective in reducing emissions from other open dust sources.

APPENDIX A
STATUTORY AND REGULATORY BACKGROUND

This section is intended to provide the primary regulatory framework for cattle feedlots. Other sections of Washington Administrative Code 173-400 may apply, but the sections listed below have the most significant bearing on the industry.

WAC 173-400, **General Regulations for Air Pollution Sources**, contains several provisions that pertain to air emissions generated by feedlots, including the following:

1. WAC 173-400-040, **General standards for maximum emissions**, which includes restrictions on visible emissions, offsite particulate fallout, fugitive dust emissions, odors, and emissions detrimental to persons or property.

   1.1 WAC 173-400-040(1), **Visible emissions**, restricts emissions to no greater than 20% opacity for more than 3 minutes in any one hour period.

   1.2 WAC 173-400-040(2), **Fallout**, states in part "No person shall cause. . . the emission of particulate matter. . . to be deposited beyond the property under direct control. . . of the source in sufficient quantity to interfere unreasonably with the use and enjoyment of the property upon which the material is deposited."

   1.3 WAC 173-400-040(3), **Fugitive emissions**, requires the use of "reasonable precautions to prevent the release of air contaminants" from any source which is considered a source of fugitive emissions.

   1.4 WAC 173-400-040(4), **Odors**, requires recognized good practice to reduce odors to a reasonable minimum.

   1.5 WAC 173-400-040(5), **Emissions detrimental to persons or property**, states in part "No person shall cause. . . the emission of any air contaminant from any source if it is detrimental to the health, safety or welfare of any person, or causes damage to property of business."

   1.6 WAC 173-400-040(8)(a), **Fugitive dust sources**, requires the use of reasonable precautions to prevent fugitive dust from becoming airborne.

2. WAC 173-400-105, **Records, monitoring, and reporting**, allows the department to require facility specific information to determine compliance, monitoring data for air contaminants, and access to the facility for inspections.

3. WAC 173-400-110, **New source review**, requires departmental approval in the form of a regulatory order prior to the installation of a new air pollution source or installation of new or additional air pollution control equipment. Any feedlot expansion which constitutes enlargement and may increase emissions as defined in WAC 173-400-030(3) will require approval prior to construction.

4. RCW 70.94.154 **RACT requirements**, requires that all existing sources of air pollution use reasonably available control technology (RACT) to minimize emissions.

   WAC 173-400-040 **General standards for maximum emissions** states in part: "Further, all emissions units are required to use reasonably available control technology (RACT) which may be determined for some sources or source categories to be more stringent than the applicable emission limitations of any chapter of Title 173 WAC."

EMERGENCY RESPONSE PLAN CONTACTS

FARM NAME	
ADDRESS	
FARM PHONE	
PERMIT NUMBER	
DIRECTIONS TO FARM	

EMERGENCY PHONE NUMBERS		**TYPE OF EMERGENCY**					
		Catastrophic Death of Production Animals	**Natural Disaster**	**Significant Spill, Land Application or Direct Discharge**	**Personal Injury**	**Fire**	**Fuel Spill**
Farm Owner		X	X	X	X	X	X
Farm Manager		X	X	X	X	X	X
Integrator		X	X				
Fire Department or Ambulance	911				X	X	
Local Law Enforcement Office	911		X	X - If on public road			X - If on public road
Equipment: Trackhoe/Dozer		X	X	X			X
Washington Department of Ecology (WDOE)	1-800-258-5990 or 1-800-OILS-911	X	X	X		X If damage to waste structure, production building	X - See Notes (1) and (2) below
Washington Emergency Management Division	1-800-562-6108		X				X - See Note (2) below
Washington Department of Ag and - State Veterinarian's Office	1-360-902-2894 or vet 1-360-902-1878	X	X				
NRCS				X			
Washington State Department of Health	1-800556-8744	X	X				
Approved Municipal Landfill		X	X			X	
Approved C&D Landfill		X - Building Debris Only	X - Debris Only			X - Debris only	
Downstream Water Supply Systems, Affected Property Owners				X			X - See Note (2) below

Note 1 - Call in the event of a significant spill at the facility that does **not** reach a water of the State.

Note 2 - Call in the event of a spill with the potential to impact surface waters or groundwater (spill causing or with the potential to cause a visible sheen in a State water). The caller should be prepared to report the name, address, and telephone number of person reporting spill, exact location of the spill, company name and location, material spilled, estimated quantity, source of spill, cause of spill, nearest downstream water with the potential to receive the spill, and actions taken for containment and cleanup.

EMERGENCY RESPONSE PLAN

The following emergencies have been identified as having the potential to occur at this operation. This plan addresses the emergency response required for the identified emergencies. A copy of this Emergency Response Plan and the Emergency Response Plan Contacts sheet shall be placed in a prominent location at the headquarters of the operation. Copies should also be kept at the owner/operator's residence and vehicle. It is the responsibility of the owner/operator to ensure that all necessary phone numbers, contact persons, and other needed information are obtained and kept current. It is suggested that the owner/operator keep updated their neighbor's contact information to be able to contact them as appropriate if the emergency may impact their neighbor's property or water resources.

In case of a **Catastrophic Death of Production Animals**, implement the following:

a) Stop all other activities to deal with the emergency.
b) Notify the integrator to remove useable mortalities and remaining live animals, if applicable.
c) Call to notify the individuals and agencies listed for this emergency on the Emergency Response Plan Contacts sheet.
d) Remove mortalities from the production areas.
e) Dispose of mortalities according to a method in the appropriate Washington Administrative Code.
f) In case of a catastrophic loss of poultry for which burial is chosen as the disposal method, a permit from the State Veterinarian is required prior to burial.
g) Record date of catastrophic deaths, number of deaths, approximate weight of mortalities, and the disposal method. If a disposal pit was used, record the location of burial pit, size of pit, and depth of cover.

In case of a **Natural Disaster**, implement the following:

a) Stop all other activities to deal with the emergency.
b) Take all measures necessary to protect human life.
c) Take all measures necessary to protect the production animals.
d) Call for help and to notify the individuals and agencies listed for this emergency on the Emergency Response Plan Contacts sheet.
e) To the extent possible considering safety concerns, take steps to stop or minimize any discharges to the environment.
f) Assess the situation and follow the response for other emergencies, if applicable.

In case of a **Significant Spill, Land Application or Direct Discharge** emergency, implement the following:

a) Stop all other activities to deal with the emergency.
b) Assess the extent of the emergency and determine how much help is needed. To the extent possible considering safety concerns, immediately take steps to stop or minimize any discharges.
c) If spreading or pumping equipment is contributing to the emergency, stop the equipment immediately. Close valves. Separate pipes to create air gap if necessary to stop manure flow.
d) If hauling equipment is involved, take all measures to stabilize the equipment and control the discharge.
e) If a containment structure is discharging, take all measures necessary to control and contain the discharge. If possible, begin pumping manure and spreading in the prescribed fields at the prescribed application rates.
f) Contain the spill or runoff from entering nearby streams or water bodies by using absorbent material or soil material from a designated area. If soil material is needed, call for earthmoving equipment (See Emergency Response Plan Contacts sheet).
g) If flow is coming from a tile, plug the tile with a tile plug immediately.
h) Call for help, if needed, and notify the individuals and agencies listed for this emergency on the Emergency Response Plan Contacts sheet.
i) Call or contact downstream public water supply or other water users. Also, it is suggested that you contact potentially affected downstream landowners.
j) If a spill is on a public road, call the local law enforcement office for traffic control and clean the spill immediately from the road and roadside if needed.
k) Prevent further runoff by incorporating the waste into the soil, if possible.
l) Initiate additional containment measures, corrective measures, or property restoration measures as directed by emergency agency officials.

In case of a **Personal Injury**, implement the following:

a) Stop all other activities and address the emergency.
b) Take all measures necessary to prevent further injury and stabilize the injured persons.
c) Call 911 and notify the individuals and agencies listed for this emergency on the Emergency Response Plan Contacts sheet.

In case of a **Fire**, implement the following:

a) Stop all other activities and address the emergency.
b) Try to extinguish the fire with appropriately rated fire extinguishers.
c) If fire cannot be contained, call for help and notify the individuals and agencies listed for this emergency on the Emergency Response Plan Contacts sheet.

In case of a **Fuel Spill**, implement the following:

a) Stop all other activities and address the emergency.
b) Take all measures necessary to control and contain the discharge as close to the spill site as possible.
c) Contain the spill or runoff from entering nearby streams or water bodies by using absorbent materials or soil material from a designated area. If soil material is needed, call for earthmoving equipment (See Emergency Response Plan Contacts sheet).
d) Notify the individuals and agencies listed for this emergency on the Emergency Response Plan Contacts sheet.
e) Initiate additional containment and remedial measures as directed by emergency agency officials.

Provide the following information when reporting an emergency:

a) Your name and phone number.
b) Directions to the farm or site of emergency.
c) Description of emergency.
d) If a spill, the type of material and an estimate of the amounts, area covered, and distance traveled.
e) If contaminants have reached surface waters or major field drains.
f) Obvious damage: employee injury, fish kill, property damage, etc.
g) Actions taken to contain situation.

Documentation of Emergency Response

The following items shall be documented, as applicable, in writing and filed with the Emergency Response Plan for future reference and emergency response training:

a) Date, time, and type of emergency.
b) If a spill, the type, cause, quantity, duration, and location of spill.
c) Affect of spill on any surface water body or potable water well.
d) Approximate quantity of spill material that left the farm property and names of affected landowners.
e) Containment and clean up efforts and their effectiveness.
f) Any damage, such as personal injury, fish kill, property damage, fire, etc.
g) Procedure followed to handle the emergency.
h) List of agencies and authorities contacted, those that responded, and the time for response.
i) Recommendations to prevent a reoccurrence.